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ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

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DATE OF ORDER CONTRACT NO.

PAGE NO

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ORDER NO.

08/13/2	020 68HERC20D0016			6	68HERC20F0289			
ITEM NO.	SUPPLIES/SERVICES	QUANTITY	10.5000.00	UNIT	AMOUNT	QUANTITY		
(a)	(b)	ORDERED (c)	(d)	PRICE (e)	(f)	ACCEPTED (g)		
	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 08/17/2020 to 08/14/2021							
1001	Base Period Requisition No: PR-OW-20-00363, PR-OW-20-00647, PR-OW-20-00731							
	Accounting Info: 20-21-B-28E-000B42-2505-2028CES045-001 BFY: 20 EFY: 21 Fund: B Budget Org: 28E Program (PRC): 000B42 Budget (BOC): 2505 DCN - Line ID: 2028CES045-001 Funding Flag: Partial Funded: \$74,992.54 Accounting Info: 20-21-B-28E-000BD4X20-2505 BFY: 20 EFY: 21 Fund: B Budget Org: 28E Program (PRC): 000BD4X20 Budget (BOC): 2505 Funding Flag: Partial Funded: \$0.00 Accounting Info: 20-21-B-28E-000B42-2505-2028CES054-001 BFY: 20 EFY: 21 Fund: B Budget Org: 28E Program (PRC): 000B42 Budget (BOC): 2505 DCN - Line ID: 2028CES054-001 Funding Flag: Partial Funded: \$898.95							
2001	Option Period 1 (Option Line Item) 08/15/2021				151,686.08			
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	TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))				\$151,686.08	•		

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO 3

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	Option Period 2					161,327.20	
	(Option Line Item)						
	08/15/2022						

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$161,327.20

SECTION B - Supplies or Services/Prices

B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION

- (a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 1001 is severable and may be incrementally funded. For this item, the sum of \$75,891.49 of the total price is presently available for payment and allotted to this contract.
- (b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.
- (c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 75 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."
- (d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.
- (e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.
- (f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.
- (g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".
- (h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

RECAPITULATION OF FUNDING TO DATE BY TASK ORDER PERIOD CONTRACT NO. 68HERC20D0016 TASK ORDER NO. 68HERC20F0289

Period of Performance - FROM 8/17/2020 through 8/14/2021

FUNDING ACTION	<u>FUND</u>	<u>NG</u>
Total Task Order Amount:	\$	75,891.49
Initial Incremental Funding:	\$	75,891.49
Balance Unfunded	\$	0.00

SECTION F - Deliveries or Performance

F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance of this Task Order shall be from 8/17/2020 through 8/14/2021 inclusive of all required reports.

SECTION G - Contract Administration Data

G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

John Healey, 202-566-0176, healey.john@epa.gov (TOCOR)

Leanne Stahl, 202-566-0404, stahl.leanne@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Gerold Young, 513-487-2660, Young.Gerold@epa.gov (Contracting Officer)

Matthew Huber, 513-569-7195, <u>huber.matthew@cpa.gov</u> (Contract Specialist)

Performance Work Statement (PWS) Contractor: Tetra Tech Contract # 68HERC20D0016 Task Order #68HERC20F0289

Project Title: Support for Preparing Materials for Presentations, Briefings and

Conferences, and General Technical Support

Task Order Contracting Officer Representative (TOCOR):

John Healey

OW/Office of Science and Technology

U.S. EPA, Mail Code 4305T 1200 Pennsylvania Avenue, NW

Washington, D.C. 20460 Phone: (202) 566-0176 FAX: (202) 566-0409

E-mail: Healey.John@epa.gov

Alternate TOCOR (Alt-TOCOR):

Leanne Stahl

OW/Office of Science and Technology

U.S. EPA, Mail Code 4305T 1200 Pennsylvania Avenue, NW

Washington, D.C. 20460 Phone: (202) 566-0404 FAX: (202) 566-0409

E-mail: Stahl.Leanne@epa.gov

Task Order Type: Time and Materials (with severable Tasks)

Period of Performance	Dates	Level of Effort (LOE) hours
Base Period	Date of Award – 08/14/2021	485
Option Period 1	08/15/2021 - 08/14/2022	680
Option Period 2	08/15/2022 - 08/14/2023	680

PURPOSE OF TASK ORDER

The purpose of this task order is to provide:

- support for project management and planning
- support for developing presentations, briefings and public outreach materials,
- support for training, meetings, conferences and workshops, and
- general technical support for activities related to fish contamination assessment and to evaluation of the health risks associated with human consumption of fish.

Contractor support required for these projects is described under four (4) task areas, including Support for Project Management and Planning (Task 1), Support for Development of Presentations, Briefings and Public Outreach Materials (Task 2), Support for Training, Meetings, Conferences and Workshops (Task 3), and General Technical Support (Task 4). Specific activities to be performed under each task are described below.

BACKGROUND

The U.S. Environmental Protection Agency's (EPA's) Office of Science and Technology (OST) within the Office of Water (OW) has conducted or is conducting a series of eight fish contamination studies:

- 1. The <u>National Study of Chemical Residues in Lake Fish Tissue</u>, a national probabilistic survey of chemical residues in freshwater fish tissue, provided the first national estimates of median concentrations and distributions for 314 chemicals in fish and defined a national freshwater fish contamination baseline for tracking pollution control progress. Results from this statistically based study allowed EPA to estimate the percentage of lakes and reservoirs across the lower 48 states with fish tissue concentrations above levels of concern for human health. For related publications, see:
 - a. Stahl, L. L., Snyder, B. D., Olsen, A. R., & Pitt, J. L. (2009). <u>Contaminants in fish tissue from US lakes and reservoirs: a national probabilistic study</u>. *Environmental Monitoring and Assessment, 150*, 3–19.
 - b. U.S. Environmental Protection Agency (USEPA) (2009). *The national study of chemical residues in lake fish tissue*. (EPA-823-R-09-006, pp. 242). Washington, DC: U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology.
 - c. Stahl, L.L., Snyder, B.D., Olsen, A.R., & Walters, L. S. (2013). <u>A national probabilistic study of polybrominated diphenyl ethers in fish from US lakes and reservoirs</u>. *Environ Monitoring and Assessment*, *185*, 10351–10364.
- 2. The National Pilot Study of Pharmaceuticals and Personal Care Products (PPCPs) in Fish Tissue was the second fish contamination study undertaken by OST. OST initiated this pilot study in 2006 to investigate the occurrence of PPCP chemicals in fish tissue. The targeted design for the study involved collecting fish samples from five effluent-dominated streams in the vicinity of wastewater treatment plant discharges (and one reference site) and analyzing fillets and livers for 24 pharmaceutical compounds and fillets-only for 12 personal care products. EPA developed a final technical report for this study, and approval for release of that report is pending. For study results, see:
 - a. Ramirez, A.J. et al. (2009). Occurrence of pharmaceuticals and personal care products in fish: results of a national pilot study in the United States. *Environmental Toxicology and Chemistry*, 28, 2587–2597.

- 3. In 2008, OST began a third fish contamination study by participating in EPA's 2008-09 National Rivers and Streams Assessment (NRSA) led by OW's Office of Wetlands, Oceans, and Watersheds (OWOW). This national statistically based survey involved selection of approximately 1,800 sampling sites in the lower 48 states that consisted of about 900 boatable river reaches and about 900 wadeable stream reaches. The study design included a statistical subset of about 180 urban rivers based on the site classification of "urban" developed for the design and the designation of rivers as 5th order streams or above. Several types of samples were collected at each site by federal, state, or contractor teams during 2008 and 2009 to assess water chemistry, physical habitat, biological community integrity, pathogen contamination in water, and chemical contamination in fish tissue. OST focused its efforts initially on supporting collection of fish and ambient water samples at the urban river sampling locations, on developing protocols for fish tissue preparation, and on providing technical oversight of fish preparation activities being conducted for the 2008-09 NRSA. Ultimately, OWOW sponsored field crews collected whole fish samples for fillet tissue analyses at 542 river sites (164 urban river sites and 378 nonurban river sites). For study results for per-and polyfluoroalkyl substances (PFAS, which were formerly referred to as perfluorinated compounds, or PFCs), mercury, and organic chemicals (PCBs, PBDEs, and pesticides), see:
 - a. Stahl, L.L., Snyder, B.D., Olsen, A.R. et al. (2014). <u>Perfluorinated Compounds in Fish From U.S. Urban Rivers and the Great Lakes</u>. *Science of the Total Environment*, 499, 185–195.
 - b. Wathen, John B., et al. (2015). A national statistical survey assessment of mercury concentrations in fillets of fish collected in the U.S. EPA national rivers and streams assessment of the continental USA. *Chemosphere*, 122, 52-61.
 - c. Batt, Angela, et al. (2017). <u>Statistical Survey of Persistent Organic Pollutants: Risk Estimations to Humans and Wildlife through Consumption of Fish from U.S. Rivers.</u> *Environmental Science and Technology*, 51, 3021-3031.
- 4. The fourth study, a statistically based survey of fish contamination relevant to human health in the Great Lakes, was conducted under EPA's 2010 National Coastal Condition Assessment (NCCA). OST, the Great Lakes National Program Office (GLNPO), and the Office of Research and Development (ORD) collaborated to conduct this study, referred to as the 2010 Great Lakes Human Health Fish Tissue Study (2010 GLHHFTS). In 2010, the NCCA in the Great Lakes involved sampling 225 nearshore sites at depths of up to 30 m or at distances up to five kilometers (5 km) from shore in the five Great Lakes (45 sites per lake) for a number of indicators, including fish tissue for ecological applications. To generate data for the human health fish tissue study, additional fish composite samples were collected at a subset of 157 sites (about 30 sites per lake). EPA analyzed the fillet samples for a number of contaminants that included mercury, PCBs, PFAS and PBDEs, and for fatty acids, and completed statistical analysis of the data in 2013. For PFAS results and fatty acid data, see:
 - a. Stahl, L.L., Snyder, B.D., Olsen, A.R. et al. (2014). <u>Perfluorinated Compounds in Fish From U.S. Urban Rivers and the Great Lakes</u>. *Science of the Total Environment*, 499, 185–195.

- b. Williams, Meghan C.W., Murphy, E.W., McCarty, H.B. et al. (2017). <u>Variation in the essential fatty acids EPA and DHA in fillets of fish from the Great Lakes region</u>. *Journal of Great Lakes Research*, 43, pp. 150-160.
- 5. OST's fifth fish contamination study consisted of a statistically based re-assessment of fish fillet contamination in U.S. rivers. OST analyzed fillet tissue from 353 samples for mercury, from 349 samples for PFAS, and from a statistically representative subset of 223 samples for PCBs. In 2018, EPA developed a technical journal article reporting the results for mercury, PCBs, and PFAS and completed internal peer review of the paper. Submission of this paper for publication was cleared by ORD in February 2019 and approved through the OST Director in March 2019. OW leadership clearance for submission of the paper to a technical journal for publication is pending.
- 6. The 2015 Great Lakes Human Health Fish Fillet Tissue Study (GLHHFFTS) is OST's sixth fish contamination study, and it consists of a statistically based re-assessment of fish fillet contamination in the Great Lakes. The EPA team collected fish samples from 152 Great Lakes sites (about 30 sites per lake) and completed fillet tissue analyses for mercury, PCBs, PFAS, dioxins/furans and fatty acids, in addition to a broad screening analysis of fillet tissue samples for contaminants of emerging concern (CECs). Data reporting for this study is pending.
- 7. OST participated in the 2018-19 NRSA to conduct a third national probability-based study of contamination in river fish relevant to human health. This is the seventh in the series of fish contamination studies undertaken to date by OST. Activities in 2018 and 2019 included working with ORD statisticians (in Corvallis, OR) to select fish contamination study sampling locations (477 river sites referred to as whole fish tissue sampling sites), providing logistical support for fish sample collection during both field seasons, and completing fish fillet tissue sample preparation for the 291 river fish samples collected for the study. As of July 31, 2019, OST completed fillet tissue analyses for mercury, PCBs, PFAS.
- 8. In 2019, OST, GLNPO, and ORD began planning for participation in the National Coastal Condition Assessment (NCCA) 2020 to conduct the Great Lakes Human Health Fish Fillet Tissue Study (2020 GLHHFFTS) under the Great Lakes portion of the NCCA. The 2020 GLHHFFTS is OST's eighth fish contamination study and the third basin-wide study of contamination in Great Lakes fish collected from nearshore areas in all five Great Lakes. EPA statisticians developed the statistically based study design for the Great Lakes portion of the NCCA and provided a list of 225 randomly selected nearshore sites (45 sites in each of the five Great Lakes) for 2020 GLHHFFTS fish sample collection. They also selected 50 Lake Michigan enhancement sites (38 island sites and 12 national park sites) for a special study being led by ORD scientists at the EPA laboratory in Duluth, Minnesota.

The target chemicals for the 2020 GLHHFFTS fish samples to be collected from the nearshore sites include mercury, all 209 PCB congeners, PCB aroclors, up to 33 PFAS, and omega-3 and omega-6 fatty acids. This study is providing the opportunity for developing trends data for contaminant levels in Great Lakes fish. The target chemicals for fish samples

collected from the 2020 ORD-Duluth Great Lakes special study enhancement sites include up to 33 PFAS and may also include mercury and 209 PCB congeners.

During 2019, EPA initiated development of NCCA 2020 documents (e.g., the NCCA 2020 Field Operations Manual) and logistics planning for the 2020 field season. EPA expects to complete the majority of fish sample collection, preparation of fillet tissue samples, and some fillet tissue analyses (e.g., mercury) from August 1, 2020 through July 31, 2021.

In addition to conducting the series of eight fish contamination studies, OST initiated a new study called the Fish Plug Evaluation Study in the summer of 2017. This study included two phases, the mercury and the selenium phase, to meet these objectives:

- to test whether fish fillet plug sampling and analysis can serve as a reliable surrogate for homogenizing and analyzing whole fillet tissue to monitor mercury concentrations in fish (mercury phase),
- to assess the comparability of selenium concentrations in fish fillet plugs vs. homogenized whole fillet tissue samples, and
- to test the applicability of fish fillet plug sampling and analysis for conducting compliance monitoring associated with EPA's fish tissue-based selenium water quality criterion.

SCOPE OF WORK

All activities described in the performance work statement (PWS) for this task order fall under the following numbered tasks in Section 3 of the contract-level PWS for Contract Number 68HERC20D0016:

- Task 3.3 Technical Guidance, Report Development, and General Program Analysis
 Task 3.9 Workshops, Conferences, Training, and Logistical Support
- Task 3.10 Expert/Peer Review Support
- Task 3.11 Public Outreach and Technology Transfer
- Task 3.13 Preparation of Presentation Materials

Task 1. Support for Project Management and Planning

The contractor shall provide support for communication and shall prepare monthly progress and financial reports.

The contractor shall participate in a kickoff meeting with the TOCOR via conference call at the beginning of the Task Order performance period and, as needed, for each new project the TOCOR issues via technical direction. The kickoff meeting with the TOCOR will cover the following topics:

- Points of contact;
- Roles and responsibilities;
- Quality assurance protocols;
- Timelines and schedules for benchmarks, milestones, and deliverables;
- Software, files, format requirements for documents, data, reports, and other deliverables;
- Processes for coordination, communication, and transfer of documents, data, reports, and other deliverables, as well as comments and revisions of deliverables;
- Dates, times, and format for monthly calls with the TOCOR;
- Monthly progress and financial reports throughout the period of the task order;
- Additional general administrative information; and
- Other topics, as needed.

The contractor shall establish communication with the EPA TOCOR and develop a regular reporting schedule throughout the period of the task order. The contractor shall also submit and prepare monthly progress and financial reports. The monthly progress report shall include project status, unexpected problems or concerns, corrective actions, lessons learned, quality assurance/quality control (QA/QC) activities, and next steps. The monthly financial reports shall include monthly expenditures and expenditures to date.

Task 2. Support for Developing Presentations, Briefings and Public Outreach Materials

The Contractor shall provide support for the development and review of up to eight presentations, briefings and public outreach materials for fish contamination studies and related topics. Presentations, briefings and public outreach materials may consist of PowerPoint presentations, posters, web materials (or similar), and will be based on, but not limited to, ongoing and new activities relating to the following fish tissue studies:

- 2008-09 NRSA, 2013-14 NRSA and 2018-19 NRSA;
- 2010 GLHHFTS, 2015 GLHHFFTS and 2020 GLHHFFTS; and,
- other fish tissue studies, such as, the Fish Plug Evaluation Study (FPES)

The Contractor shall also provide support for preparing and/or reviewing public outreach materials for EPA fish contamination studies and materials related the fish contamination studies or closely related OST Fish Program topics developed by other sources (e.g., other EPA contractors or EPA offices, such as OWOW, GLNPO, or ORD).

Presentations, briefings and public outreach materials may consist of internal presentations or briefings for EPA managers and technical staff or external presentations for other stakeholders (government agencies, environmental organizations, scientific conferences or meetings, industry associations, academia, general audiences) via webinars, fact sheets, brochures, posters, and materials for display on EPA web sites. Materials for these presentations, briefings and public outreach materials will generally include text presenting a wide range of information about or related to one or more of the fish tissue studies listed above and a variety of graphics (e.g., tables, various types of plots, pie charts, etc.) displaying fish tissue study or related information and data, but it could also include materials for presentations using other media.

The internal fish tissue study presentations and briefings will be subject to EPA TOCOR and Branch- or Division-level review and approval. The internal presentations or briefings will generally require at least three revisions of the initial draft files to produce the final files. The external presentations, briefings and public outreach materials will be subject to additional reviews by the OST Director and OW leaders, which will require at least six revisions of the initial draft files to produce the final files. The external public outreach materials must also meet all EPA specifications in the development of products for public distribution, including EPA requirements for displaying products online that are 508 compliant. The EPA TOCOR will provide the Contractor with information on EPA specifications for producing public outreach materials. The EPA TOCOR will review and approve the final presentation, briefing, and public outreach files. The Contractor shall also conduct technical reviews of presentations provided by the EPA TOCOR and transmit review comments to the EPA TOCOR to consider for incorporation into the presentations.

The Contractor shall provide staff with extensive human health fish tissue contamination assessment expertise and experience to organize, compile, integrate, prepare, display, format, and review fish tissue study materials and related information and data. The Contractor shall develop materials for presentations, briefings, or public outreach purposes, integrate them into the presentations, briefings, or public outreach materials, and submit the draft presentation, briefing or public outreach files in electronic and/or hard copy formats (e.g., PowerPoint or Word) based on written technical direction from the EPA TOCOR.

Task 3. Support for Training, Meetings, Conferences and Workshops

The Contractor shall provide support for a variety of training workshops, meetings, and conferences related to EPA's fish contamination studies. EPA anticipates Contractor attendance at quarterly national fish study team coordination meetings held at EPA Headquarters (HQ) and at national or regional meetings and conferences to present fish study information (e.g., virtual/online attendance at the 2020 American Fisheries Society (AFS) meeting, virtual/online attendance at the 2020 SETAC meeting, and in-person attendance at the 2021 National Water Quality Monitoring Conference). In addition, EPA will require routine support for development of presentation and briefing materials for a variety of audiences. Specific information for each subtask is described below.

Subtask 3.1: Development of training materials related to EPA fish studies for a variety of audiences

Under Subtask 3.1, the Contractor shall be responsible for developing training materials related to EPA fish contamination studies for a variety of audiences. These materials may consist of slides, project summaries, handouts, and other information about or related to the fish studies. The content of these materials may relate to any aspect of the fish studies, including study design, implementation of the study, data analysis, study results, and storage and retrieval of fish tissue study data. As directed by the EPA TOCOR, the Contractor shall develop fish study training materials appropriate for a variety of audiences, including EPA management, EPA Regions, other EPA program offices and Federal agencies, States, Tribes, and environmental, professional, or industry organizations. During the TO Option Year 1, EPA will require support for training material development and for instruction of field sampling teams on the protocols for collection, handling, and shipping of 2022 National Lakes Assessment (NLA) fish samples at a series of up to 12 training workshops during March through June 20. During Option Year 2 of this Task Order, EPA will require support for training material development and for instruction of field sampling teams on the protocols for collection, handling, and shipping of 2023-24 NRSA human health fish samples at a series of up to 12 training workshops during March through June 2023.

Subtask 3.2: Logistical support for planning and participating in training, meetings, conferences, and workshops

For *Subtask 3.2*, the Contractor shall provide logistical support for planning and participating in training, meetings, workshops, and scientific conferences as specified by the EPA TOCOR through written technical direction. EPA anticipates that this subtask will apply to the following events during the task order period of performance:

- quarterly meetings at EPA Headquarters in Washington, DC;
- national or regional conferences and meetings, including:
 - the 2020 AFS meeting in Columbus, OH during August 2020 (virtual meeting);
 - the 2020 SETAC meeting in Fort Worth, TX during November 2020 (virtual meeting);
 - the 2021 National Water Quality Monitoring Conference in Providence, RI during April 2021 (in-person attendance);
- up to 12 training workshops for Option Period 1 and up to 12 training workshops for Option Period 2 (see page 16, Travel).

This support shall consist of a broad range of activities, such as the following:

• Developing agendas for meetings, workshops, and training events.

- Planning and developing new materials related to the fish studies and/or customizing existing materials for use during training events, meetings, conferences, and workshops.
- Contacting training, meeting, and workshop participants to obtain information necessary for planning and participating in these events.
- Compiling and organizing fish study information for distribution at training events, meetings, conferences, and workshops.
- Shipping or transporting fish study-related materials to training events, meetings, conferences, and workshops (e.g., posters, handouts, fact sheets, supplies for training demonstrations, etc.). If applicable, materials for quarterly fish study team meetings shall be shipped to EPA HQ in Washington, DC. For estimating costs of shipping materials for scientific conferences and meetings, assume shipments to the two locations identified for *Subtask 2* above.

Subtask 3.3: Attendance at training events, meetings, conferences, and workshops to serve in a range of roles

Under *Subtask 3.3*, the Contractor shall provide staff with appropriate skills and experience to attend meetings, workshops, and scientific conferences relevant to EPA's fish studies and serve in a range of roles at these events as specified by the EPA TOCOR. These roles may include trainers, presenters, facilitators, and note-takers.

At the written technical direction of the EPA TOCOR, the Contractor shall attend national or regional meetings and scientific conferences related to fish contamination assessment and fish study team meetings at EPA Headquarters. The Contractor shall also participate in conference calls involving fish study team members and/or study participants and EPA staff for discussion and resolution of program and technical issues. EPA anticipates Contractor attendance at quarterly fish study team meetings at EPA HQ and two scientific conferences and meetings listed under Task 3, *Subtask 2* to serve as presenters during the task order base performance period. In estimating costs for participation in the scientific conferences and meetings, the Contractor shall assume the virtual/online attendance of a Senior Fisheries Biologist with long-term experience supporting EPA fish tissue studies for the full duration of the AFS meeting, the SETAC meeting and the National Water Quality Monitoring Conference (note: due to COVID-19 travel restrictions, conference attendance will be virtual/online for the AFS meeting and for the SETAC meeting but may be in-person for the National Water Quality Monitoring Conference).

Subtask 3.4: Follow-up activities for training, meetings, conferences, and workshops

For *Subtask 3.4*, the Contractor shall provide support for follow-up activities to training, meetings, and workshops. These activities may include the following:

- Developing training/meeting/workshop evaluations and summarizing suggestions to improve future training/meetings/workshops.
- Preparing and distributing meeting summaries electronically to attendees.
- Documenting issues for resolution based on discussions during training, meetings, conferences, or workshops.
- Revising and distributing study materials based on resolution of issues identified during training, meetings, conferences, or workshops.
- Responding to follow-up process questions from training, meeting, conference, or workshop participants.
- Contacting training, meeting, conference, or workshop participants to obtain additional information for the studies.

Task 4. General Technical Support

The Contractor shall provide general technical support for projects related to monitoring contaminants in fish and to identifying health risks associated with human consumption of fish. This support may include, but is not limited to, the following activities:

- Planning for future studies or enhancement of existing studies related to contaminants in fish tissue.
- Literature searches and other research to identify information for supporting fish contamination study planning and reporting (e.g., Fish Plug Evaluation Study mercury and selenium data reporting) and for developing EPA documents related to evaluating contaminants in fish and assessing human health risks from fish consumption (e.g., Revision of EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1: Fish Sampling and Analysis, 2000).
- Technical reviews of various types of materials and documents related to the EPA Fish Program, including, but not limited to, study proposals, presentations, guidance documents, journal articles, and reports.
- Participation on conference calls or webinars and at meetings, workshops, or conferences
 as technical experts on fisheries science and fish contamination monitoring (particularly
 on national and regional scales) for topics or issues related to existing and future EPA
 fish contamination studies and to other related studies or projects.
- Development of technical information related to EPA fish contamination studies and other EPA Fish Program projects in response to EPA management requests.
- Preparation of data and related files in response to requests for EPA fish contamination study data (e.g., National Lake Fish Tissue Study data requests).

The Contractor shall perform specific activities under this task as assigned through written technical direction by the EPA TOCOR. For cost estimating purposes, the Contractor shall assume support for the following activities during the initial period of performance for this task order.

- Literature searches to support work on revision of the EPA Volume 1 Fish Advisory Guidance, publication of Fish Plug Evaluation Study mercury and selenium phase results, publication of Fish Plug Evaluation Study selenium phase results, and revision of the existing 2010 Great Lakes Human Health Fish Tissue Study paper to add 2015 Great Lakes Human Health Fish Fillet Tissue Study results.
- Technical reviews of 8 documents, presentations, journal articles, or reports related to the EPA Fish Program.
- Participation on 8 conference calls or webinars as technical experts on fisheries activities
 related to existing and future EPA fish tissue studies or to other studies related to the EPA
 Fish Program.
- Preparation for final disposition and storage of project data (e.g., field sampling data and
 fish sample preparation data) and other project records for seven (7) EPA fish tissue
 studies (i.e., National Lake Fish Tissue Study, PPCP Pilot Study, 2008-09 NRSA Fish
 Tissue Study, 2013-14 NRSA Fish Tissue Study, 2018-19 NRSA Fish Tissue Study,
 NCCA 2010 GLHHFTS, and NCCA 2015 GLHHFFTS).

SCHEDULE OF DELIVERABLES

The Contractor shall provide all written deliverables, such as documents, reports, and summaries, in both hard copy and electronic form or as detailed by the EPA TOCOR in written technical direction. The Contractor shall ensure that all software and fonts used to develop deliverables are readily available on the OST computer network and compatible with OST printer systems.

The Contractor shall follow the quality assurance and quality control plan under Contract Number 68HERC20D0016 and the applicable fish contamination study QAPPs in preparing task order deliverables. EPA generally requires one hard copy for most deliverables. The specific number of copies that EPA requires for each deliverable will be identified in written technical direction issued by the EPA TOCOR and in accordance with contract general requirements. The Contractor shall adhere to the specifications summarized under the General Requirements section and those specified under this section in producing deliverables under this task order.

- 1. The Contractor shall subject all written deliverables to QA/QC measures, including proofreading, grammar, readability, consistency of style, consistent formats of tables and figures, etc.
- 2. The Contractor shall produce deliverables submitted on an annual, quarterly, monthly, or weekly basis in a format that is identical to formats used for these deliverables in earlier years of a study unless otherwise specified by the EPA TOCOR. The EPA TOCOR will

- provide copies of past deliverables to serve as templates for developing these periodic deliverables.
- 3. The Contractor shall produce hard copy deliverables on bright white bond paper that contains no more than 50% recycled stock.

Routine delivery of deliverables shall be by email for electronic copies and overnight mail for hard copies unless another alternative is specifically requested by the EPA TOCOR through written technical direction. Below is a summary of deliverables and schedule for Tasks 1-4. Note that the number of days specified for deliverables refers to business days.

TASK	DELIVERABLES	SCHEDULE
1	Communication/Kick-off call	Within 3 days of TO
		Award
	Regular reporting schedule	As requested by the EPA
		TOCOR in written
		technical direction
	Progress and financial reports	Monthly, in accordance
		with contract reporting
		requirements
2	Presentation, briefing, training, and program materials	As specified in EPA
		TOCOR written
		technical direction
	2018-19 NRSA draft presentation and briefing materials	As specified in EPA
		TOCOR written
		technical direction
	2018-19 NRSA final presentation and briefing materials	One week after receipt of
	2016-19 NKSA final presentation and offering materials	One week after receipt of TOCOR comments
	NCCA 2010 and 2015 PFAS fillet data draft poster	As specified in EPA
	Neca 2010 and 2013 11 A5 finet data draft poster	TOCOR written
		technical direction
		teenmear an ection
	NCCA 2010 and 2015 PFAS fillet data final poster	Three business days after
	mix at a received or a message control of the received and the received the receive	receipt of TOCOR
		comments
	NCCA 2010 GLHHFTS and 2015 GLHHFFTS draft	As specified in EPA
	presentation and briefing materials	TOCOR written
	· -	technical direction
	NCCA 2010 GLHHFTS and 2015 GLHHFFTS final	Three business days after
	presentation and briefing materials	receipt of TOCOR
		comments

-		
	Draft presentation and briefing materials for the NCCA 2020 Great Lakes human health fish fillet tissue studies.	As specified in EPA TOCOR written technical direction
	Final presentation and briefing materials for the NCCA 2020 Great Lakes human health fish fillet tissue studies.	One week after receipt of TOCOR comments
	Draft presentation and briefing materials for the Fish Plug Evaluation Study (FPES)	As specified in EPA TOCOR written technical direction
	Final presentation and briefing materials for the Fish Plug Evaluation Study (FPES)	Three business days after receipt of TOCOR comments
3	Draft meeting agendas	2 weeks before meeting date
	Final meeting agendas	1 week before meeting date
	Meeting summaries	As specified in EPA TOCOR written technical direction
	Meeting evaluations, etc.	2 weeks after meeting date
	General technical support deliverables	As specified in EPA TOCOR written technical direction
4	Planning for future studies or enhancement of existing studies related to contaminants in fish tissue.	As specified in EPA TOCOR written technical direction
	Literature searches and other research to identify information for supporting fish contamination study planning and reporting and for developing EPA documents related to evaluating contaminants in fish and assessing human health risks from fish consumption.	As specified in EPA TOCOR written technical direction
	Technical reviews of various types of materials and documents related to the EPA Fish Program, including, but not limited to, study proposals, presentations, guidance documents, journal articles, and reports.	As specified in EPA TOCOR written technical direction
	Participation on conference calls, webinars, meetings (including quarterly fish study team meetings at EPA Headquarters), workshops, or conferences as technical experts on fisheries science and fish contamination	As specified in EPA TOCOR written technical direction

monitoring for topics or issues related to existing and future EPA fish contamination studies and to other related studies	
or projects.	
Development of technical information related to EPA fish	As specified in EPA
contamination studies and other EPA Fish Program projects	TOCOR written
in response to EPA management requests.	technical direction

GENERAL REQUIREMENTS OF THE TASK ORDER AND SCHEDULE

Limitation of Contractor Activities

The contractor shall submit drafts of all deliverables to the TOCOR for review prior to submission of the final product. The contractor shall incorporate all TOCOR comments into all final deliverables, unless otherwise agreed upon by the TOCOR. The contractor will adhere to all applicable EPA management control procedures as implemented by the CO, CLCOR, and TOCOR.

The contractor shall provide necessary technical and scientific services related to approval of new methods and method modifications. The types of services required are described further under the scope of work section.

Task Order Administration through Technical Direction

The Contract level COR, the TOCOR, or the Alt-TOCOR (when TOCOR is away on leave) is permitted to provide technical direction. Technical direction must be within the statement of work of the contract and includes: (1) Direction to the Contractor which assists the Contractor in accomplishing the PWS, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the Contract Level Contracting Officer Representative.

Work conducted under this Task Order shall not duplicate work conducted under any other Task Order or Work Assignment under any other contract. As required, the EPA TOCOR will provide technical direction in accordance with Clause H-19 of the contract, EPAAR 1552.237-71 TECHNICAL DIRECTION (AUG 2009) and the Contract Level Performance Work Statement (PWS).

Quality Assurance and Quality Control

The Contractor shall provide EPA with monthly reports of QA activities performed during implementation of this task order. These monthly QA reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from

the QAPP, and corrective actions taken. If desired, the Contractor may include this as a part of the contract-required monthly financial/technical progress report.

The contractor shall address the QA requirements of this TO through Tetra Tech's Quality Management Plan for the contract. The contractor shall discuss with the EPA TOCOR if any of the specific TO tasks are not readily covered under the approved SOPs. If not readily covered under the approved SOPs then a supplement QAPP shall be developed if needed.

The contractor shall submit relevant QA documentation as requested by the EPA TOCOR. The contractor shall permit a QA review of data entry documents and procedures by an authorized agent of EPA at any time during the performance period (given advanced notification).

The EPA will assess Contractor performance in accordance with the Quality Assurance Surveillance Plan (QASP), Attachment 1 to this PWS.

Deliverable Formatting

For deliverables formatting and procedures, the contractor shall provide draft and final written deliverables for review by the TOCOR and prepare in electronic format by the scheduled delivery date provided by the TOCOR. If a hard copy is needed, the TOCOR will provide technical direction to the contractor. As well, the TOCOR will provide instructions to the contractor for draft and final deliverables format as discussed in tasks under the scope of work section. Each initial deliverable shall be provided to the TOCOR in draft form for review and comment. The contractor shall incorporate TOCOR comments into revisions of the drafts. The contractor shall incorporate procedures to ensure that these drafts are reasonably free from errors before providing them to EPA. All drafts and final reports shall be approved by the TOCOR.

The contractor shall discuss the computer file formats to be used for word processing, spreadsheet, and graphics with the TOCOR prior to file preparation. Documents that the TOCOR identifies for posting on EPA's webpage shall be Section 508 compliant.^a

Printing

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

Deliverable Due Dates

The contractor shall assume the deliverable due dates in the tables for each task and presented further and summarized in the Deliverable Schedule section. The TOCOR needs to provide to the contractor technical direction where deliverable dates are not specified in tables. Major technical deliverables shall be subject to internal contractor peer review by an expert(s) not directly involved

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a See http://www.epa.gov/epahome/accessibility.htm.

in the mainstream Task order tasks. Deliverables will be prepared with proper adherence to EPA style and format requirements.

Travel

The contractor shall provide specific travel details and costs for any travel directly chargeable under this TO and must submit it for travel approval by the TOCOR and the Contract-Level COR (CLCOR) before each trip occurs (as specified by the contract per clause H.33). All travel under this TO shall follow contract requirements. During this TO performance period, EPA anticipates local and long-distance travel. For planning purposes, the estimated travel is summarized in the table below:

Period of	Dates	Type of Travel	Level of Effort
Performance			(hours)
Base Period	08/15/2020 -	2-3 conferences	Up to 70
	8/14/2021		_
Option Year 1	08/15/2021 -	Up to 12 trainings to support NLA 2022	Up to 560
_	8/14/2022	and 2 conferences	_
Option Year 2	08/15/2022 -	Up to 12 trainings to support NRSA	Up to 560
_	8/14/2023	2023-24 and 2 conferences	_

Summary Travel Information for Twelve 2018-19 NRSA Fish Sampling Training Workshops

For estimating costs for each of the 12 training workshops in Option Year 1 and Option Year 2, assume the following:

- One Trainer per workshop
- **Assumed** duration of 5 days per workshop (3 days for training and 2 days for travel)
- **Assumed** locations for individual workshops as follows:
 - 2019 NRSA Train-the-Trainer workshop in Sacramento, CA
 - Region 1 training workshop in North Chelmsford, MA
 - Region 2 training workshop in Trenton, NJ
 - Region 3 training workshop in Wheeling, WV
 - Region 4 training workshop in Athens, GA
 - Region 5 training workshop in Chicago, IL
 - Region 6 training workshop in Dallas, TX
 - Region 7 training workshop in Kansas City, KS
 - Region 8 training workshop in Denver, CO
 - Region 9 training workshop in Sacramento, CA
 - Region 10 training workshop in Portland, OR
 - One additional training workshop in Traverse City, MI

Local travel to quarterly fish study team meetings is required as described under Task 2. At a

minimum, staff serving as the Senior Fisheries Biologist and the Fish Study Logistics Coordinator shall attend the quarterly fish study team meetings. The EPA TOCOR anticipates scheduling up to four day-long quarterly fish study team meetings during the TO base period of performance at EPA Headquarters in August 2020, November 2020, February 2021, and May 2021.

Meetings, Conferences, Training Events, Award Ceremonies and Receptions

No single event under this task order is anticipated to exceed \$20,000. The contractor shall immediately notify the EPA Contracting Officer (CO), CLCOR and TOCOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. All training workshops referred to in **Task 2** of the PWS will be planned and funded by other organizations, thus the EPA TOCOR will not require support under this TO for any workshop that exceeds \$20,000.

Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer (CO).

EPA anticipates long distance travel to up to three conferences (Task 3). The Contractor shall assume the following staff requirements and information for cost estimate planning purposes.

- American Fisheries Society Annual Meeting
 - o Location: Columbus, OH
 - o Duration: 4 days (plus 2 travel days) in August 2020
 - o Staff required: One Senior Fisheries Biologist
- Society of Environmental Toxicology and Chemistry (SETAC) Annual Meeting
 - o Location: Fort Worth, TX
 - o Duration: 4 days (plus 2 travel days) in November 2020
 - o Staff required: One Senior Fisheries Biologist
- Miscellaneous Conference (e.g. National Water Quality Monitoring Conference)
 - o Assumed Location: TBD
 - o Assumed Duration: 3 days (plus 2 travel days)
 - o Staff required: One Senior Fisheries Biologist

Confidential Business Information

For this Task Order, the contractor shall not be accessing any Confidential Business Information (CBI).

Budget Reporting

The Contractor shall report to the TOCOR and Contract Level COR (CLCOR) when 85 percent of the total budget for this Task Order has been depleted.

Identification as Contracting Staff

To avoid the perception that contractor personnel are EPA employees, contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and prior to the start of any meeting. Contractor personnel are prohibited from acting as the Agency's official representative. When speaking with the public the contractor should refer all interpretations of policy to the TOCOR.

Attachments:

1. Contract Level QASP

ATTACHMENT 1 QUALITY ASSURANCE SURVEILLANCE PLAN

"Technical Support for Assessing, Managing, and Communicating the Ecological and Human Health Risks of Contaminants in Water, Fish, and Sediments, and of Microbial Pathogens in Surface Waters"

Purpose: The requirements performed under this contract are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The TOCOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Contract Level Contracting Officer's Representative (CL-COR) in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract. The TOCOR for each individual task order will provide the review of the deliverables at the location specified in the identified task order.

Ge	neral Management a	and Administration	
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contracting Officer's Representative (COR), and Task Order COR (TOCOR) throughout performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOCOR. In cases where issues have a direct impact on project schedules and/or cost, the Contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules and/or cost shall be brought to the attention of the appropriate EPA TOCOR within 3 business days of occurrence.	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to identify unreported issues. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.	Unsatisfactory rating under the category of Business Relations in the Contractors Performance Appraisal Review System (CPARS) if two or more incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards. Fewer than two incidents per contract period where the contractor does not meet the measurable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Business Relations.
Timeliness:	During any period of	100% of active task	Unsatisfactory rating under
Services and deliverables shall	performance, 90%	orders under the	the category of Timeliness in
be in accordance with schedules	of all submitted	contract will be	the CPARS when the

stated in each task orders, unless amended or modified by an approved EPA action.	deliverables shall be submitted no later than one business day past the due date.	reviewed by the EPA TOCOR monthly (via Monthly Progress Report & milestones established for each deliverable) to compare actual delivery dates against the approved delivery dates. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.	Contractor does not meet the measurable performance standards during an applicable period of performance. A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Timeliness if the contractor meets the measurable performance standards.
Cost Management and Control: The Contractor shall monitor, track and accurately report level-of-effort, labor cost, and other direct cost to EPA through progress reports and approved special reporting requirements. The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate timekeeping.	The Contractor shall manage costs to the level of the approved ceiling on the task orders. The Contractor shall notify the EPA TOCOR/COR when 75% of the approved funding ceiling for the work assignment is reached.	The EPA COR will routinely meet with the Contractor's Project Manager to discuss the work progress, and the contract and individual task order expenditures. The EPA COR shall review the Contractor's Monthly Progress Reports and request the TOCOR's verification of expenditures and technical progress before authorizing invoice payments.	Unsatisfactory rating under the category of Cost Control in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance. A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measurable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the Contract.
Technical Effort: The analyses or products developed by the Contractor shall be factual, defensible, and based on sound science and engineering. All data shall be collected from reputable sources; quality assurance measures shall be conducted in accordance with contract and Agency requirements, and any additional requirements outlined in individual task orders or technical directives. Any work	All (100%) analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements	EPA will review all analyses conducted and products prepared by the Contractor and will independently consider their merit. EPA may opt to peer review analyses to further validate their merit.	Unsatisfactory rating under the category of Quality of Product or Service in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.

requiring the Contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendation and all other options and recommendations considered.	specified by the TOCOR in written technical direction and should meet the objectives stated in the task order. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.		A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Quality of Product or Service if the contractor meets the measurable performance standards.
Quality Assurance/Quality	The Contractor shall	100% of active task	Unsatisfactory rating under
Control (QA/QC):	notify the EPA	orders under the	the category of Quality
The Contractor shall comply	TOCOR of any	contract will be	Assurance/Quality Control in
with the quality assurance	issues that impact	reviewed by the	the CPARS if more than
requirements specified in EPA	project quality	EPA TOCOR	three incidents occur during
Requirements for Quality	within 3 business	monthly (via	an applicable period of
Assurance Project Plans	days of occurrence.	Monthly Progress	performance when the
(http://www.epa.gov/quality/qs-	The Contractor shall	Report) to assess contractor	Contractor does not meet the measurable performance
docs/r5-final.pdf) and as	notify the EPA	compliance with the	standards.
required by the EPA TOCOR.	TOCOR and COR	approved QAPP,	standards.
The Contractor shall assign	within 5 business	and to identify	A satisfactory rating will be
appropriately leveled and skilled technical and quality	days of occurrence	unreported issues	reported in the CPARS
assurance personnel to develop	of any requests to	related to project	Performance Evaluation
a Quality Assurance Project	collect or use	quality and requests	System under the category of
Plan (QAPP) for all tasks	environmental data	to collect or use	Quality Assurance/Quality
requiring collection or use of	without an EPA-	environmental data	Control if the contractor
environmental data.	approved QAPP.	without an EPA-	meets the measurable
The Control of the Co		approved QAPP.	performance standards.
The QAPP shall be developed in consultation with the EPA	The Contractor shall	The EPA TOCOR	
TOCOR, and fully approved by	document all	will report any	
the appropriate EPA personnel,	QA/QC activities,	issues to the EPA	
before initiation of activities	including	QAO and COR, who	
involving environmental data	compliance with the	will bring the	
collection or use.	quality objectives specified in the	issue(s) to the Contractor's	
	QAPP, in Monthly	attention through the	
Any change in the planned environmental data activities	Progress Reports.	EPA CO for	
that become necessary during		immediate	
the course of the project shall be		resolution.	
fully documented in approved		and the second s	
revised versions of the QAPP			
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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE	OF PAGES	
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REC	UISITION/PURCHASE REQ. NO.	5. PROJECT	NO. (If applicable)	
P00001	See Block 16C				, ,,	
6. ISSUED BY CODE	CAD	7. ADMINISTERED BY (If other than Item 6) CODE				
CAD US Environmental Protection 26 West Martin Luther King D Mail Code: W136 Cincinnati OH 45268-0001						
8. NAME AND ADDRESS OF CONTRACTOR (No., street	, county, State and ZIP Code)	(_V) 9A	AMENDMENT OF SOLICITATION NO.			
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CODE 198549560	FACILITY CODE		8/13/2020			
	11. THIS ITEM ONLY APPLIES 1					
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C. THIS SUPPLEMENTAL AGREEMEN D. OTHER (Specify type of modification		O AUTHORI	TY OF:			
E. IMPORTANT: Contractor X is not	is required to sign this document	t and return	copies to the issui	ng office.		
14. DESCRIPTION OF AMENDMENT/MODIFICATION DUNS Number: 198549560 TOCOR: John Healey Max Expir App: Leanne Stahl The purpose of this modifica modification signed by Raoul unchanged.	e Date: 08/14/2023	Invoi	ceApprover: John Heale	y Alt In t admini	strative	
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(Signature of person authorized to sign)	_	-	(Signature of Contracting Officer)	SIGNATURE	10/02/2020	

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NAME OF OFFEROR OR CONTRACTOR TETRA TECH, INC.

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A)	(B)	(C)	(D)	(E)	(F)	
	Payment:					
	RTP Finance Center					
	US Environmental Protection Agency					
	RTP-Finance Center (AA216-01)					
	109 TW Alexander Drive					
	www2.epa.gov/financial/contracts					
	Durham NC 27711					
	Period of Performance: 08/17/2020 to 08/14/2021					
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CODE		CILITY CODE					
	11. THIS ITE	M ONLY APPLIES TO	AMENDMENTS OF S	OLICITATIONS			
(a) By completi or (c) By separa RECEIVED AT by virtue of this communication	knowledge receipt of this amendment prior to ng items 8 and 15, and returning	copies of the amendment acludes a reference to the sol EIPT OF OFFERS PRIOR TO ready submitted, such change mendment, and is received p	nt; (b) By acknowledging recei icitation and amendment num THE HOUR AND DATE SPE e may be made by letter or ele	ipt of this amendment or abers. FAILURE OF YO CIFIED MAY RESULT I ectronic communication,	n each copy of the UR ACKNOWLE IN REJECTION	DGMENT	TO BE OFFER. If
			DIFICATIONS OF COME				
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PUR NUMBER IN ITEM 10A.		1.00			NTRACT	ORDER
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
	D. OTHER (Specify type of modification and	l authority)					
		s required to sign this			s to the issuir	ng office	
This contra 4.2105, red Telecomm	act/order is being modified in acc quiring contracting officers to inc unications and Video Surveilland ed for the full text version of FAI	cordance with the ap lude FAR clause 52. ce Services or Equip	plicability instructions 204-25, Prohibition o ment.	s in interim FAR (on Contracting fo	Case 2019-0 r Certain	009, an	d FAR
Except as provi	ded herein, all terms and conditions of the do	cument referenced in Item 9A	or 10A, as heretofore change	ed, remains unchanged	and in full force	and effect.	
			16A. NAME AND TITLE OF				
			Raoul D. Scott, Dire	ctor Policy, Train	ing and Ove	ersight	Division
15B. CONTRA	CTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A		RAOUL SCOTT 1:40:17 -04'00'	16C. DA	TE SIGNED
(Signature of person authorized to sign)			(Signature	of Contracting Officer)			

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b) and in the applicability instructions in interim FAR Case 2019-009, insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) <u>Definitions</u>. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)